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## **DETAILED ACTION**

## **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with CHRISTENSON, ALAN Reg. No. 54036 on 03/12/2010.

2. The application has been amended as follows:

Claim 1, (currently amended) A system, comprising:

a first master device generating a first data stream;

a second master device generating a second data stream, the first and second master devices being independent;

a redundancy manager coupled to the first and second master devices; and

a slave device coupled to the redundancy manager,

wherein the redundancy manager is operable to receive the first data stream from the first master device and the second data stream from the second master device, and

wherein the redundancy manager is operable to selectively forward one of the first and second data streams to the slave device <u>based on a validity estimation of the</u>

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first data stream, a validity estimation of the second data stream, mastership transfer commands from the first and second master devices, and timing considerations,

wherein the timing considerations prevent switching back and forth between forwarding the first data stream and the second data stream if less than a threshold amount of time has passed.

Claims 18-23, (cancelled)

Claim 24, (currently amended) A system, comprising:

a first master device;

a second master device;

a subsea tool responsive to commands received from the first and second master devices;

means for switching mastership of the subsea tool between the master devices; and

means for controlling coupled to the means for switching mastership, wherein the means for controlling asserts and de-asserts a signal to control the means for switching mastership based on requests originating from an active master device and requests originating from an idle master device,

wherein the means for controlling further controls the means for switching
mastership based on a validity estimation of the data streams from the first and second
master devices and timing considerations.

Claim 25, (cancelled)

Claim 29, (new) The system of claim 1 wherein the forwarded data stream causes the slave device to control a valve.

Claim 30, (new) The system of claim 1 wherein the forwarded data stream causes the slave device to control an actuator.

Claim 31, (new) The system of claim 1 wherein the forwarded data stream causes the slave device to control a motor.

## Remarks/Allowable Subject Matter

- 3. Claims 1-17, 24, and 26-31 are allowed.
- 4. An Appeal conference was held and the examiner initiated an interview to propose incorporating allowable subject matter to the independent claims and an agreement was reached.
- 5. The following is an examiner's statement of reasons for allowance: prior art taken individually or in combination fails to particularly disclose, fairly suggests, or render obvious a system wherein the redundancy manager is operable to selectively forward one of the first and second data streams to the slave device based on a validity estimation of the first data stream, a validity estimation of the second data stream, mastership transfer commands from the first and second master devices, and timing considerations,

wherein the timing considerations prevent switching back and forth between forwarding the first data stream and the second data stream if less than a threshold amount of time has passed.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NIMA MAHMOUDZADEH whose telephone number is (571)270-3527. The examiner can normally be reached on Monday - Friday, 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chirag G. Shah can be reached on (571) 272-3144. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/NIMA MAHMOUDZADEH/ Examiner, Art Unit 2477

> /Chirag G Shah/ Supervisory Patent Examiner, Art Unit 2477